

IRON SHIPS.

3653

Rec 25/4/64 & 29/4/64

1864

1862

19. 1798 Survey held at Belfast Date 19th April

the New Iron Brigantine "Volador" Master John Hinrichsen

Tonnage Gross 143 - 46 Engine Room Register Built at Belfast Launched 11 April

When Built 1864 By whom built Harland & Wolff Owners Gerhard Lomer

Port belonging to Belfast Destined Voyage Hamburg

Surveyed Afloat or in Dry Dock Specially Surveyed while Building on Patent Ship's after Launching

Length aloft	Feet. Inches.		Extreme Breadth	Feet. Inches.		Depth from top of Upper Deck } Feet. Inches.		Power of Engines	Horse No.
	113	2		21	-	11	10		
Distance of Frames or Ribs from moulding } edge to moulding edge, all fore and aft	Inches in Ship. 21		Inches required per Rule. 21		Stem, if bar iron, moulding and thickness		Inches. 16ths. In Ship. In Ship. 6 x 1/2 6 x 1/2		
Floors, Size of Angle Iron, and No. 2 at bottom of Floor Plate	Inches. 2 1/2	Inches. 2 1/2	16ths. 6/16	Inches. 2 1/2	Inches. 2 1/2	16ths. 6/16	Stern-post, if bar iron, moulding and thickness 6 x 1/2 6 x 1/2		
depth and thickness of Floor Plate at mid line	13/2	5/16	13/2	5/16	Keel, if bar iron, depth and thickness		6 x 1/2 6 x 1/2		
depth and thickness of Floor Plate at Bilge Keelson	4 1/2	5/16	Garboard Plates, thickness..		Description of Iron. Dundee iron		4/16 4/16		
Size of Reversed Angle Iron, and No. 2 at top of Floor Plate	2 1/4	2 1/4	5/16	2 1/4	2 1/4	5/16	From Garboard to upper part of Bilge 4/16 4/16		
Frames, Size of Angle Iron, single or double	2 1/2	2 1/2	6/16	2 1/2	2 1/2	6/16	From upper part of Bilge to Sheerstrakes 5/16 5/16		
Reversed Iron, N to every frame or every frame	2 1/4	2 1/4	5/16	2 1/4	2 1/4	5/16	Sheerstrakes 6/16 6/16		
Beams, Deck (N. double Angle Iron or Bulb Iron with double Angle Iron on top)	5	3 1/2	8/16	2	2	4/16	Breadth & thickness of Butt Straps to outside plating 4 5/16 4 5/16		
depth & thickness of plate amidships	5	8/16	5	5/16	Planksheers		Material Red Pine & Hackmatack		
double or single Angle Iron on lower edge	4 1/2		4 1/2	Gunwale Plate or Stringer on ends of Up. Dk Beams		18	5/16	18 5/16	
average space between	4 1/2		4 1/2	Angle Iron on ditto		3.3	8/16	3.3 6/16	
if wood (N. sided & moulded)	-		-	Waterway		Material Red Pine & Hackmatack		-	
Hold, or Lower Deck (N. double Angle Iron or Bulb Iron with double Angle Iron on top)	-		-	Deck		Material Yellow Pine & Hackmatack		2 1/2 2 1/2	
depth & thickness of plate amidships	-		-	Ceiling in Hold		Material Red Pine		2 1/2	
double or single Angle Iron on lower edge	-		-	Ceiling betwixt Decks		-		2	
average space between	-		-	Beam Clamps		-		-	
if wood (N. sided & moulded)	-		-	Shelf		-		-	
Paddle, wood, sided and moulded or if Iron, size of Plate	-		-	Stringer Plates on ends of Hold or Lower Dk Beams		-		-	
Engine	-		-	Ceiling between Decks		-		-	
Keelson, wood, sided & moulded, iron, size of plate, if Box, give sketch & dimensions	-		-	Stringer or Tie Plates outside Hatchways		8 1/2		4/16 9 4/16	
Side or Bilge	-		-	Deck Beam Clamps		-		-	
Number	3		3	Shelf		-		-	
				Stringers in Hold		-		-	
				Deck, Lower		-		-	

Transoms, material Iron or, if none, in what manner compensated for.

Knight-heads " " Bulkheads, N. 1 Thickness of 4 in.

Hawse Timbers " " are they free from defects? " how secured to the sides of the ship rivetted between two frames

The Frames or Ribs extend in one length from Keel to Gunwale rivetted through plates with (5/8 in.) rivets, about (4 1/2) apart.

The reverse angle irons on the floors extend in one length across the middle line from 2 1/2 to 4 feet on each side alternately to upper part of bilge

" " " on the frames " " " from Keel to Keel

Keelson, how are the various lengths of plates or angle irons connected? With butt straps and double rivetted

Plates, Garboard, double or single rivetted to keel & at upper edge, with rivets (5/8 in.) diameter averaging (3 x 2 1/2 in.) from centre to centre of rivet.

" Edges from Garboards to upper part of bilge, worked carvel with a lining piece (5/8 in.) thick, or clencher, double or single rivetted; rivets (5/8 in.) diameter, averaging (2 1/2 in.) from centre to centre of rivets.

" Butts from Keel to turn of bilge, worked carvel with a lining piece (6 x 4/16) thick, double or single rivetted; rivets (5/8 in.) diameter, averaging (2 1/2 in.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? Alternately

" Edges from bilge to planksheer, worked carvel with a lining piece (5/8 in.) thick, double or single rivetted; rivets (5/8 in.) diameter, averaging (2 1/2 in.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? Alternately

" Butts from bilge to planksheers, worked carvel with a lining piece (5 x 4/16) thick, or clencher, double or single rivetted; rivets (5/8 in.) diameter averaging (2 1/2 in.) from centre to centre of rivets. Breadth of laps in double rivetting (3 1/2) Breadth of laps in single rivetting (2 1/4)

Planksheer, how secured to the plating of the sides } Explain by sketch, }

Waterway " " planksheer and to the Beams } if necessary. }

Side trussing " " breadth and thickness of plates " how secured? Red Pine & Hackmatack

Deck trussing " " " " " " ?

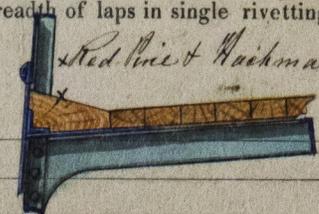
Deck Beams, how secured to the side? Keel plates welded & rivetted to frames

Hold or Lower Deck " " " " " " ?

Paddle " " " " " " ?

No. of breasthooks Five crutches One how are pointers compensated? By plate iron rivetted to frames

What description of iron is used for the angle iron and plate iron in the vessel? Dundee iron



Builder's Signature Harland & Wolff

120437-0224

3553 Iron.

Workmanship. Are the lands or laps of the clenwork in all cases in breadth at least five times the diameter of the rivets in double rivetted edges and butts, and at least three times the diameter of the rivets where single rivetting is admitted? Yes
Do the edges of the carvel work and of the butts lay close together throughout their length without requiring any making good of deficiencies? Yes
Do the fillings between the ribs and plates fill in solid with single pieces, or are they in short lengths of various thicknesses? Filled in solid
Do the holes for rivetting plate to frames, lining pieces, or plate to plate, &c., conform well to each other? Yes and are the rivet holes well and sufficiently countersunk in the outer plate? Yes
Are there any rivets which either break into or have been put through the seams or butts of the plating? a few

Her Masts, Yards, &c. are in Good condition, and sufficient in size and length.

She has SAILES.

Mersey Dock & Harbour Board Testing Department CABLES, &c.

ANCHORS, and their weights.

N ^o .		Tested to <u>18</u> ^{tons}	Fathoms.	Inches.		N ^o .	Weight.
1	Fore Sails,	Chain <u>18</u>	90	1	Porter's Patent <u>Proved to 14</u>	1	10.2
2	Fore Top Sails,	<u>Manila</u> Hempen Stream Cable	90	6	Bower, <u>11</u>	1	11.2
2	Fore Topmast Stay Sails,	"Hawser	90	4	Stream,	1	2.3.2
2	Main Sails,	Towlines	-	-			
	Main Top Sails,	Warp	-	-	Kedge,	1	1.1.0
and well found in other sails		All of <u>Good</u> quality.					

Her Standing and Running Rigging Found to be sufficient in size and Good in quality.

She has 16 1/2 Feet Long Boat and 14 feet Jolly Boat

The present state of the Windlass is Good Capstan Minch good and Rudder Good Pumps Iron cast metal good

General Remarks, Statement and Date of Repairs, extent of corrosion (if any) both internally and externally, and condition of rivets.

DATES of Surveys held while building, as per Section 17.		
1st.	On the several parts of the frame, when in place, and before the plating was wrought	<u>January 4th 1864</u>
2nd.	On the plating during the progress of rivetting	<u>" 29th "</u>
3rd.	When the beams were in and fastened, and before the decks were laid	<u>" 4th "</u>
4th.	When the ship was complete, and before the plating was finally coated	<u>March 21st "</u>
5th.	After the ship was launched	<u>April 19th "</u>

In addition to the requirements of the Rules, she has double bars of $3 \times 3 \times \frac{1}{8}$ in angle iron rivetted on Ridge keelson for 33 feet amidships, also reverse bars on every alternate frame up to deck beam knees, for 32 feet midships, Diagonal Lee plates crossing to each mast $4 \frac{1}{2} \times 5 \frac{1}{8}$ in. Beams $5 \times 3 \frac{1}{2} \times \frac{1}{8}$ in. throughout. Chains and Anchors one the 145 ton scale,

Flat of floor inside to turn of Ridge, was Portland Cemented, and the rest of shell inside & out

In what manner are the surfaces preserved from oxidation? Coated three with Lead paint, and after being launched she was put on Patent Slip, and again coated with two of Preparation, and one of M^cQuinces Patent green paint

I am of opinion this Vessel should be classed A1

The amount of the Fee £ 2 : - : is received by me, Wm Linton

Wm Linton Special £ 8 : 13 : 6

Certificate (if required) £ 10 : 15 : 6

Committee's Minute 26th April 1864

Character assigned B

The hull of this Sailing Brig of Iron appears eligible for the grade recommended by the Committee except the omission to state the nature and condition of her masts Yards &c.

April 25/64

